

Burke-Gilman Trail Redevelopment

CAG Meeting

June 21, 2005

Burke-Gilman Trail-Widening Criteria

Standards/guidelines:

National/State/County:

- *Regional Trail Inventory and Implementation Guidelines*, 2004, King County
- *Guide for the Development of Bicycle Facilities*, 1999, AASHTO
- *Bicycle Facilities Design Guidance*, WSDOT
- *Trails for the Twenty-First Century*, 2001, Rails-to-Trails Conservancy

City of Lake Forest Park

Environmentally Sensitive Areas LFPMC 16.16 and 16.18 (soon to be 16.16)

- Landslide Hazard Area Buffers
- Steep Slopes Hazard Area Buffers
- Wetland Buffers
- Stream Buffers
- Tree Protection and Replacement LFPMC 16.14

Burke-Gilman Trail-Widening Criteria

Background materials:

- Right-of-Way Survey and Title Analysis
- Trail Crossing Plan
- Wetlands Reconnaissance-Level Study
- Arborists Report
- Preliminary Geotechnical Investigation
- Drainage Analysis
- Input from CAG members
- Input from general public

Burke-Gilman Trail-Widening Criteria

Background materials (cont.):

- **Lake Forest Park Comprehensive Plan**

Environmental Quality 11.3: Support alternatives to the dependence on individual vehicles such as expanded mass transit, cycling, and walking and other forms of non-motorized transportation in the city.

Capital Facilities 2.3: Encourage the multiple use of corridors for major utilities, trails and transportation rights-of-way.

Recreation and Open Space Policy 2.1: Promote development and maintenance of safe walking and bicycling paths through and throughout the city.

Transportation Policy TR 1.5: Encourage non-motorized travel by establishing and implementing non-motorized improvements, such as bicycle route signage and trail development.

Transportation Policy TR 2.1: Reduce the need for roadway expansion by encouraging the use of alternative modes of transportation and non-peak use of regional arterials.

Transportation Policy TR 3.8: Promote the education of current and future commuters about the benefits of commuting by bicycle and transit or by car/vanpooling with others.

Transportation Policy TR 4.2: Develop a non-motorized transportation network based on the following criteria:

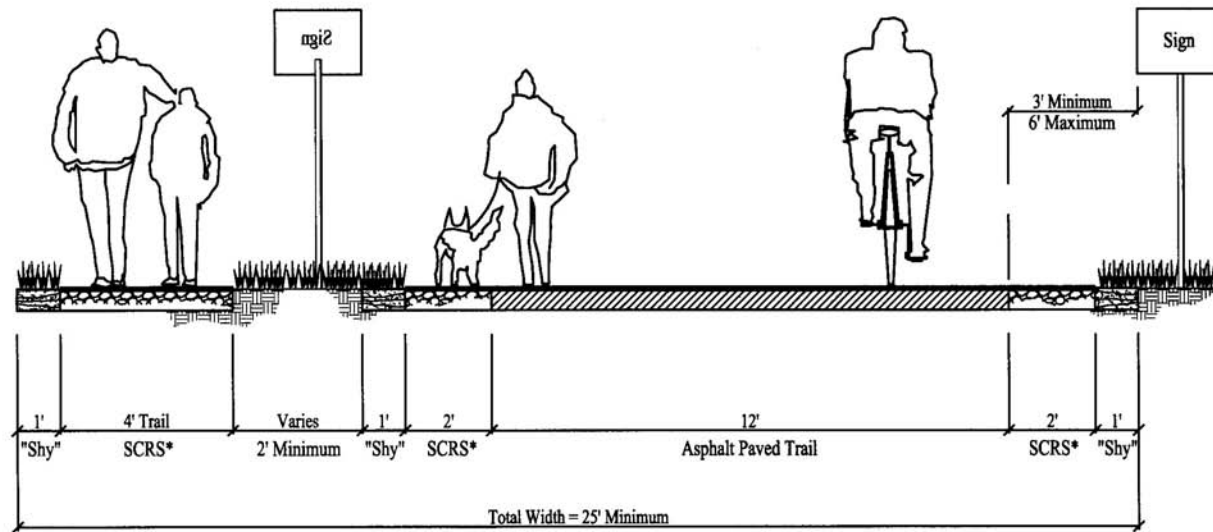
- a. Link pedestrian and bicycle facilities such as the Burke-Gilman Trail in King County to Montlake Terrace's section of the Interurban Trail in Snohomish County.
- b. Encourage and support development of off-road pedestrian and bicycle facilities.

Burke-Gilman Trail-Widening Criteria

Recommendations for trail redevelopment are based on the following:

- Input/information gathered in past six months from subconsultants as well as CAG members and general public
- Comprehensive Plan and Municipal Code of the City of Lake Forest Park
- Nationally recognized standards and guidelines, especially those outlined in King County's Regional Trail Inventory and Implementation Guidelines.
- Funding source guidelines

King County Preferred Sections



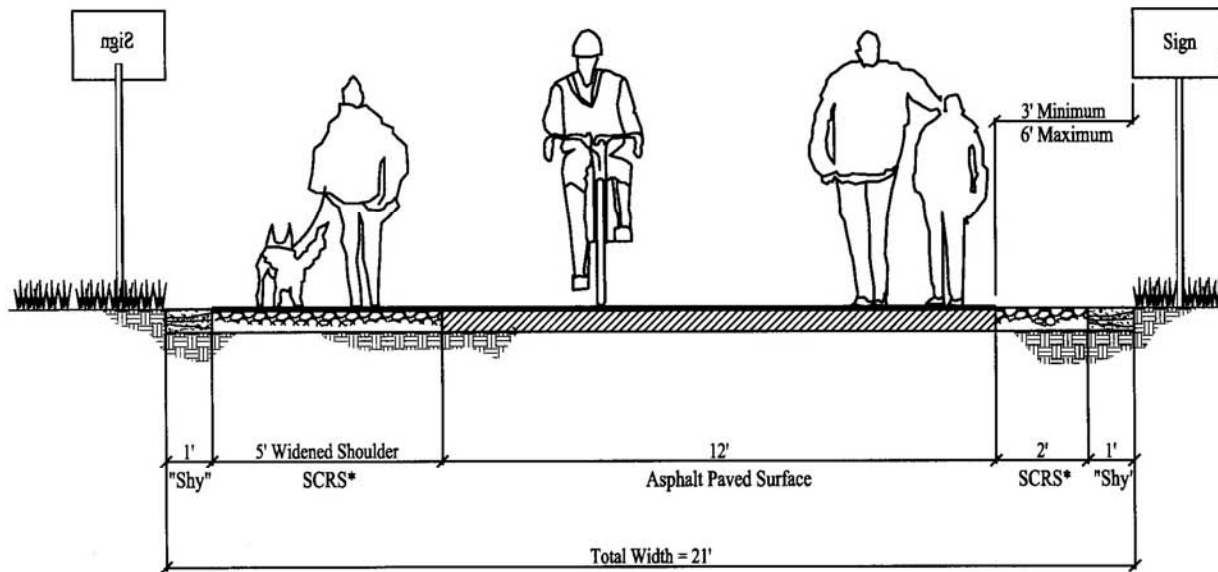
Alternative 1

*Stabilized Crushed Rock Surfacing

Scale: 3/4"=1'-0"

Maximum King County trail width: 25 feet

- 4-foot separated path of stabilized crushed rock
- grass buffer of variable width
- 12-foot wide paved trail
- 2-foot wide shoulder of stabilized crushed rock



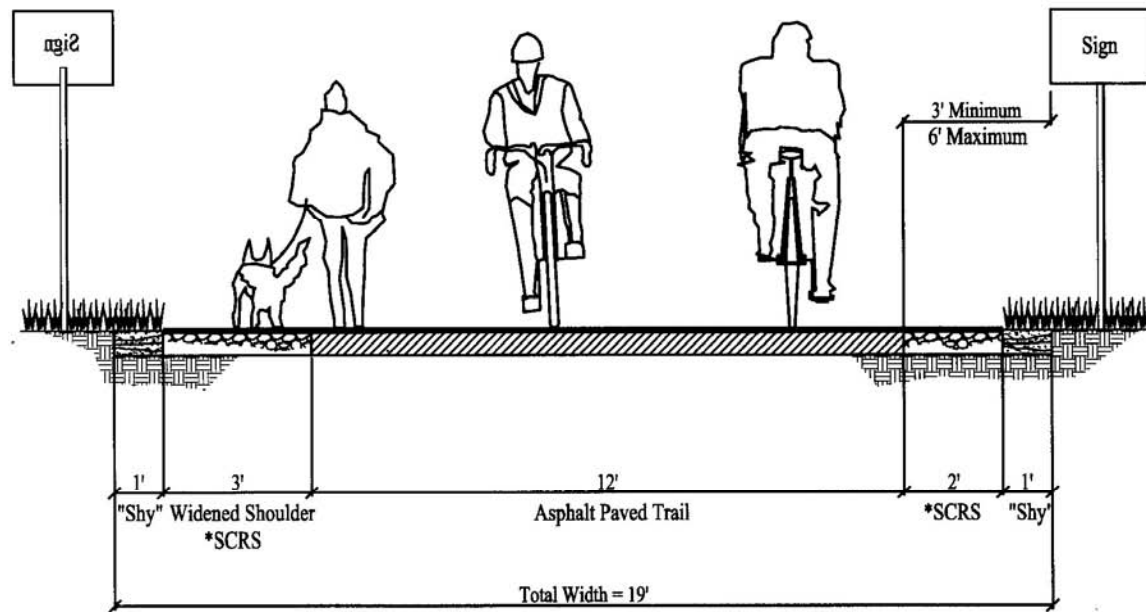
Alternative 2

Scale: 3/4"=1'-0"

* Stabilized Crushed Rock Surfacing

Alternative King County trail width: 21 feet

- 5-foot shoulder of stabilized crushed rock
- 12-foot paved trail
- 2-foot shoulder of stabilized crushed rock



Alternative 3

Scale: 3/4"=1'-0"

*Stabilized Crushed Rock Surfacing

Minimum King County trail width: 19 feet

- 3-foot shoulder of stabilized crushed rock
- 12-foot wide paved trail
- 2-foot wide shoulder of stabilized crushed rock



AASHTO Minimum Trail Section

AASHTO minimum trail width:

- 2-foot shoulder stabilized crushed rock
- 12-foot paved surface
- 2-foot shoulder stabilized crushed rock

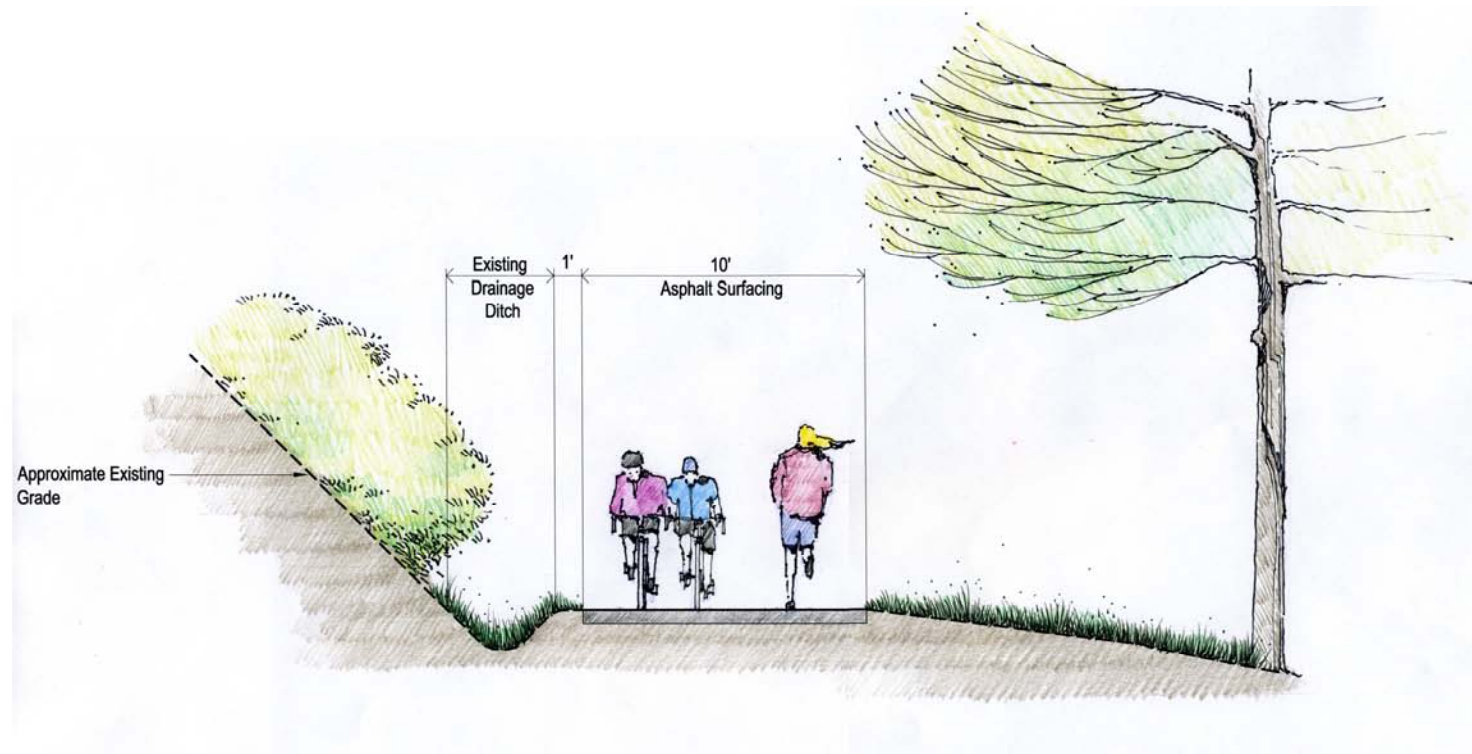


Recommended Trail Section

Recommended trail section

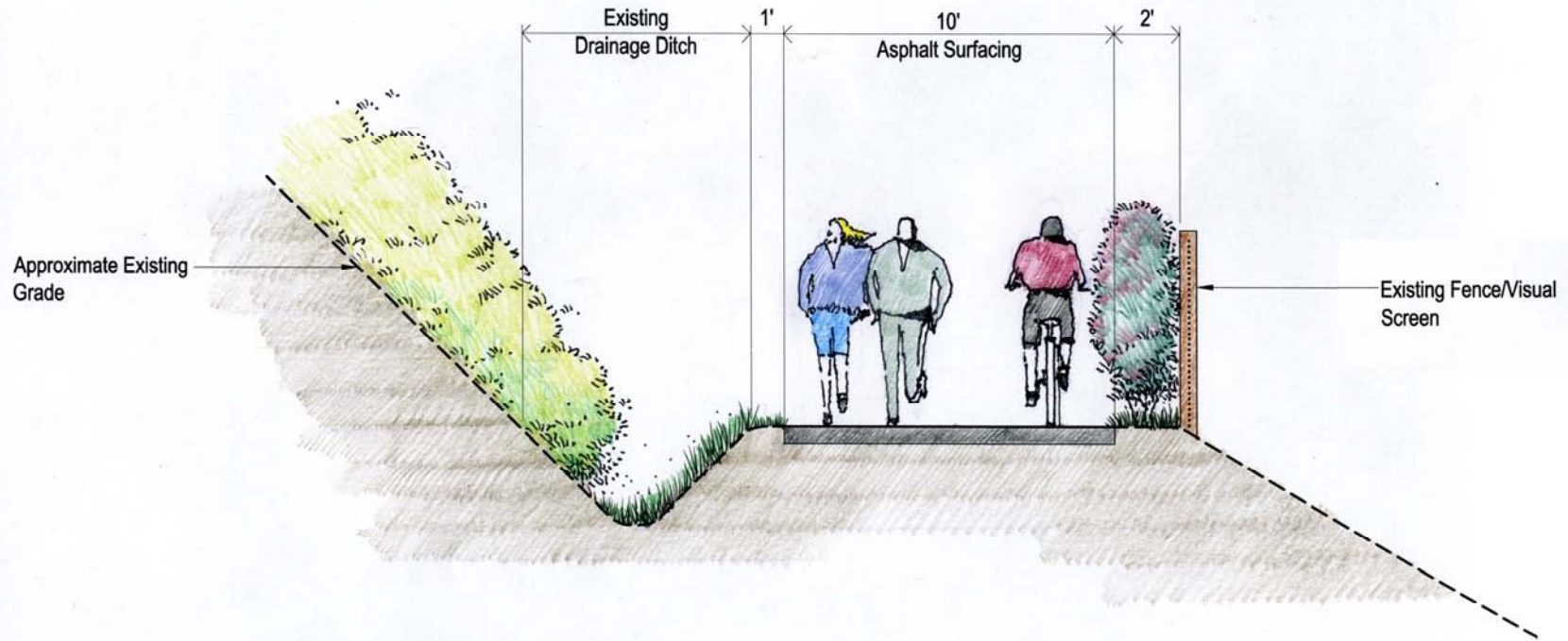
- 3-foot shoulder stabilized crushed rock
- 12-foot paved surface
- 3-foot shoulder stabilized crushed rock
- More accommodating for pedestrians

Burke-Gilman Trail Redevelopment



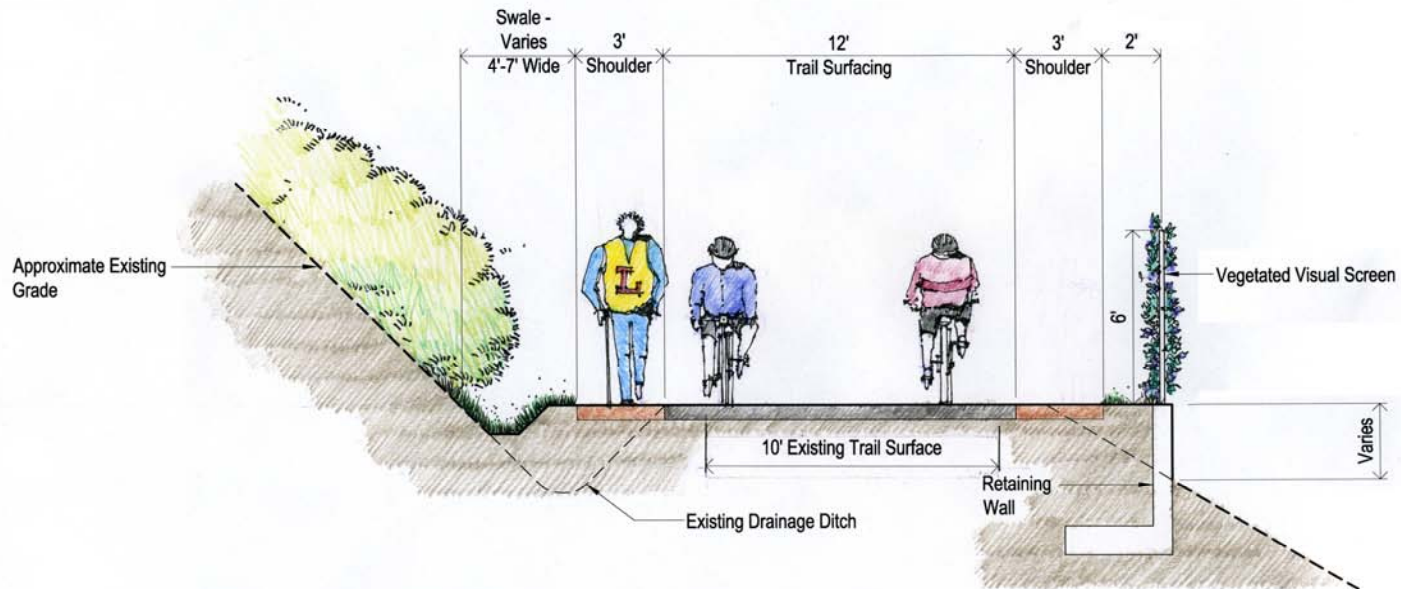
Existing Condition

- Existing drainage ditch – varies in depth, length
- 1-foot transition shoulder
- 10-foot paved surface



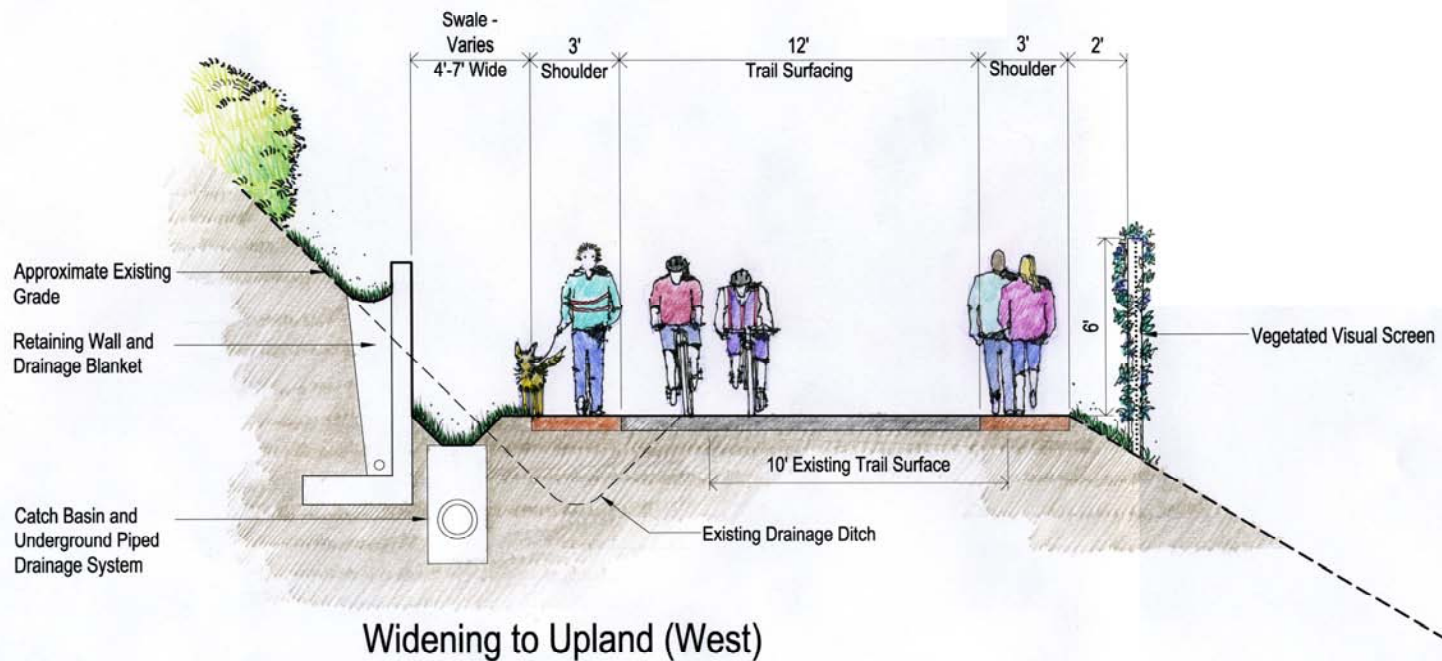
Existing Condition

- Upland slope (west)
- Drainage ditch of varying depth, length
- 1-foot transition shoulder
- 10-foot paved surface
- Existing fence/visual screen



Widening to Lakeside (East)

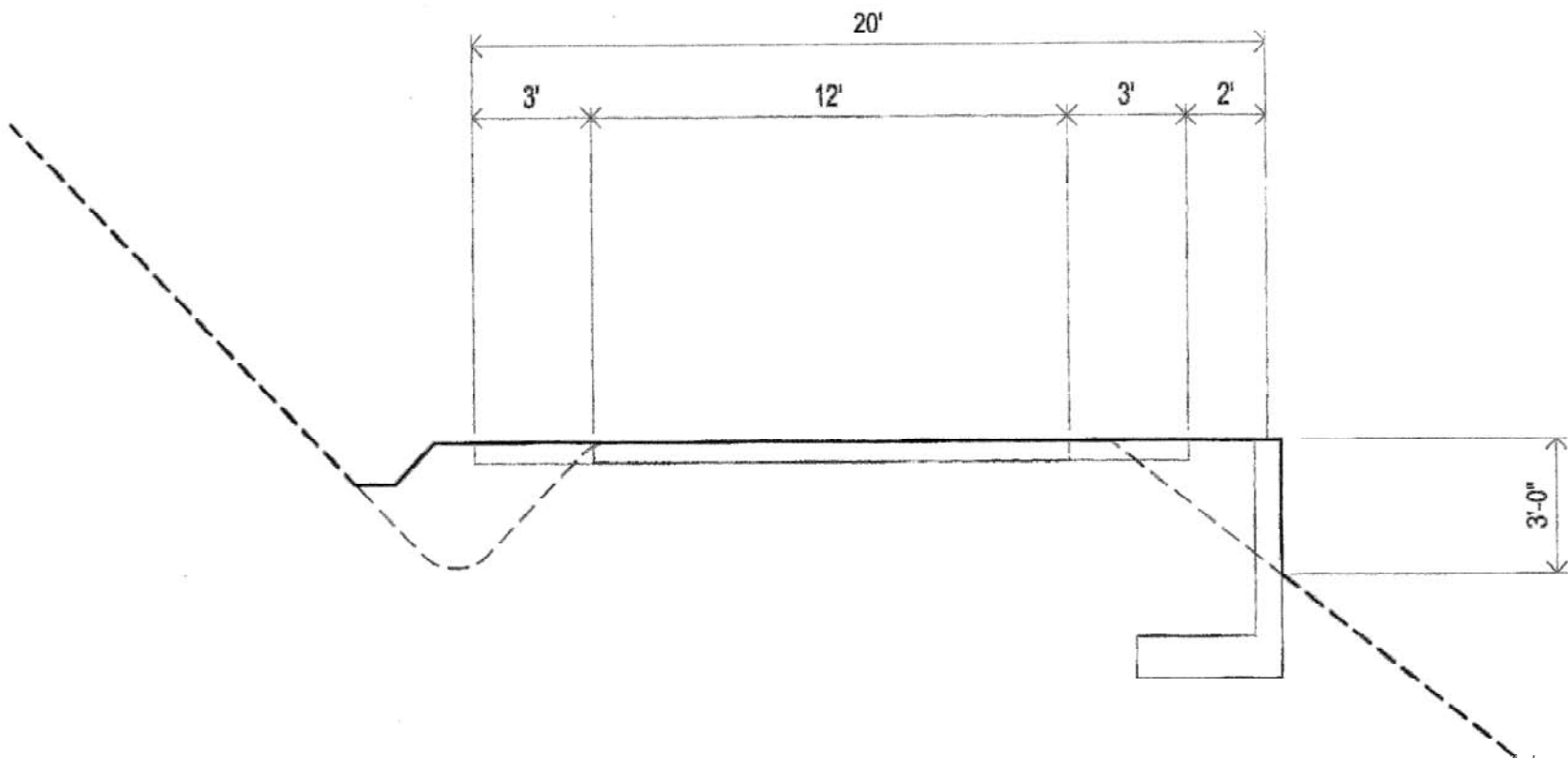
- Reconstruct drainage ditch
- 3-foot crushed rock shoulders
- 12-foot paved surface
- Down slope retaining wall required in places (height varies)
- Vegetated screen



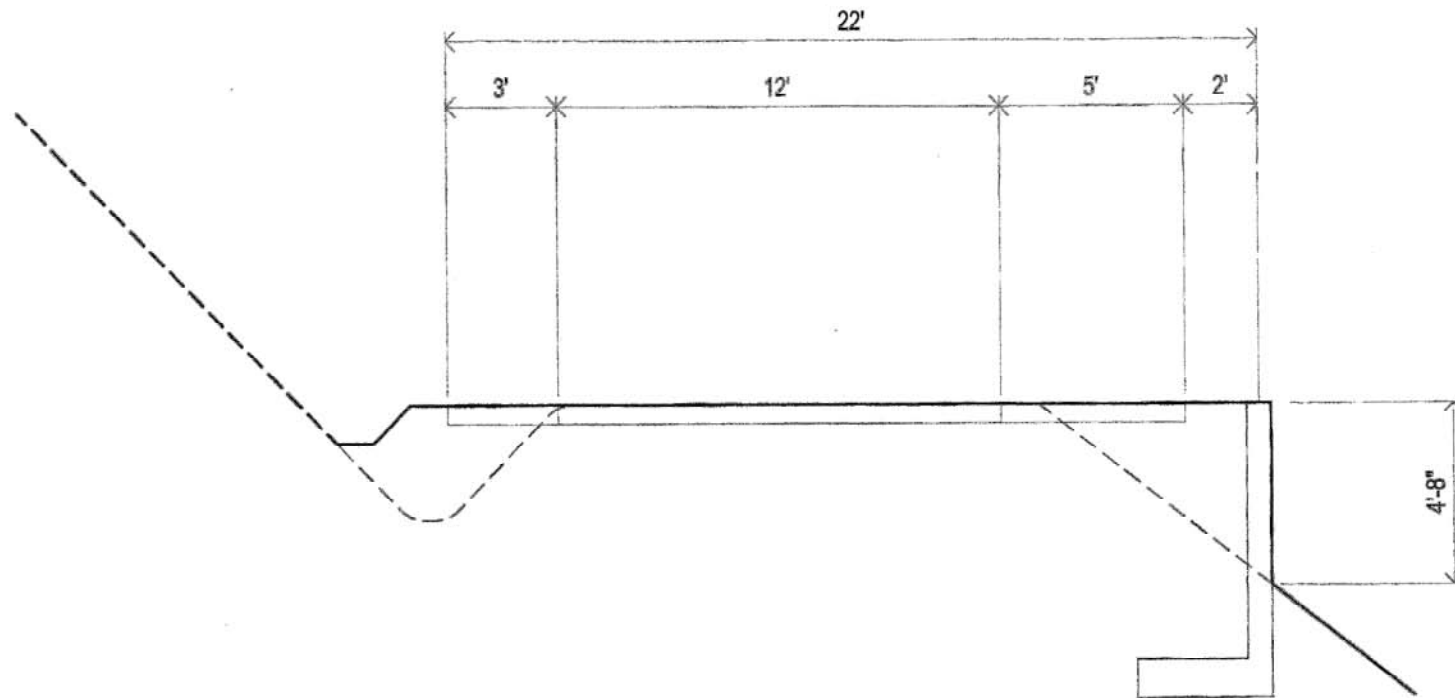
- Reduces effects on downhill property owners
- Preserves downhill vegetation
- Wall required in some places
- Potential wetlands/mitigation
- Requires installation of new storm drain system
- Potential claims from uphill property owners
- More costly

Burke-Gilman Trail Redevelopment

Wall Height/Trail Width Assessment

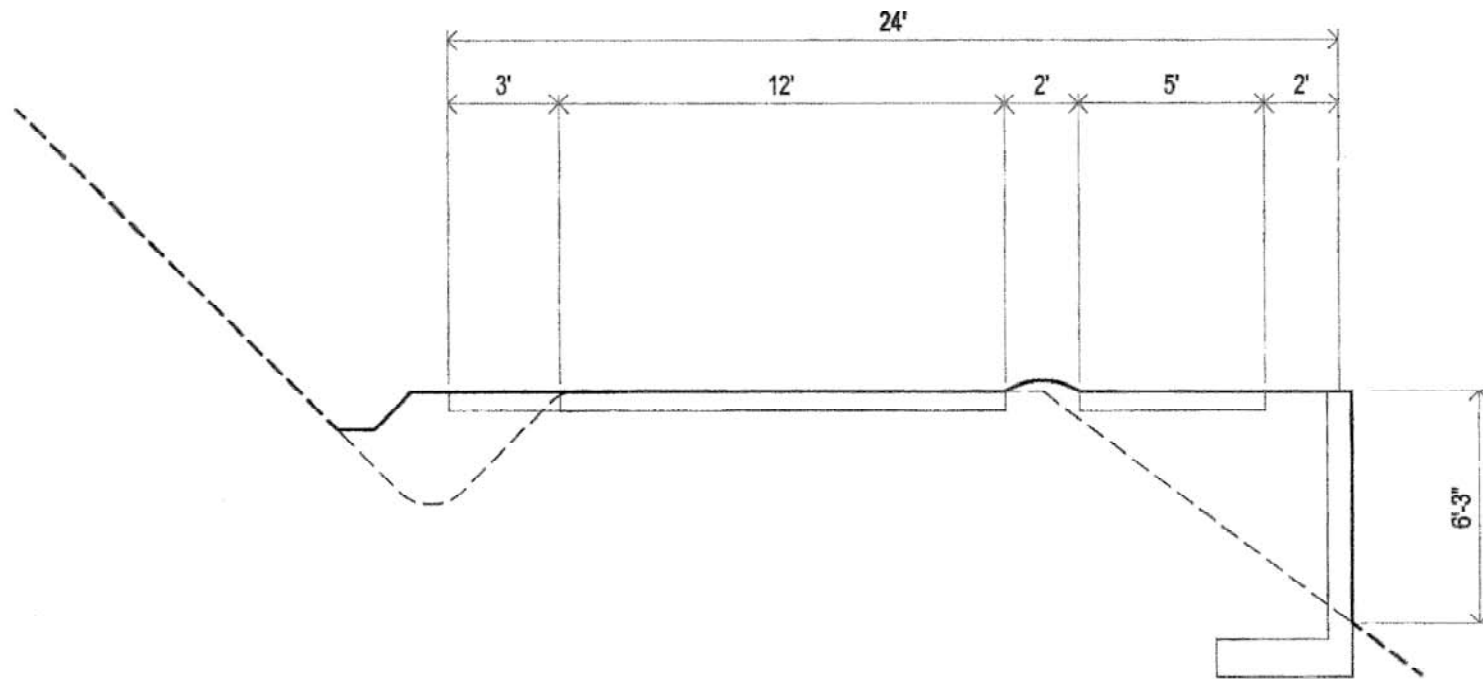


- 20-foot overall trail width
- Reconstructed drainage ditch
- 3-foot wall



Section showing wall required for 22-foot trail width

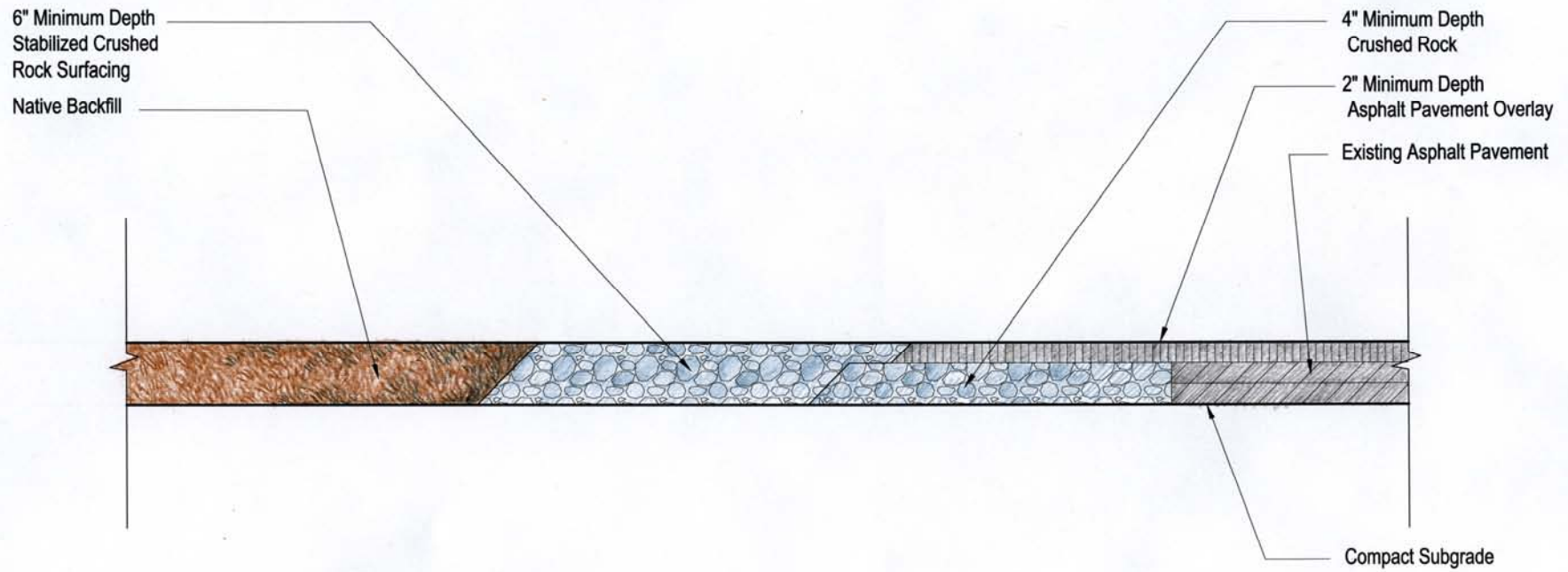
- 22-foot width
- Reconstructed drainage ditch
- Approximate 5-foot wall



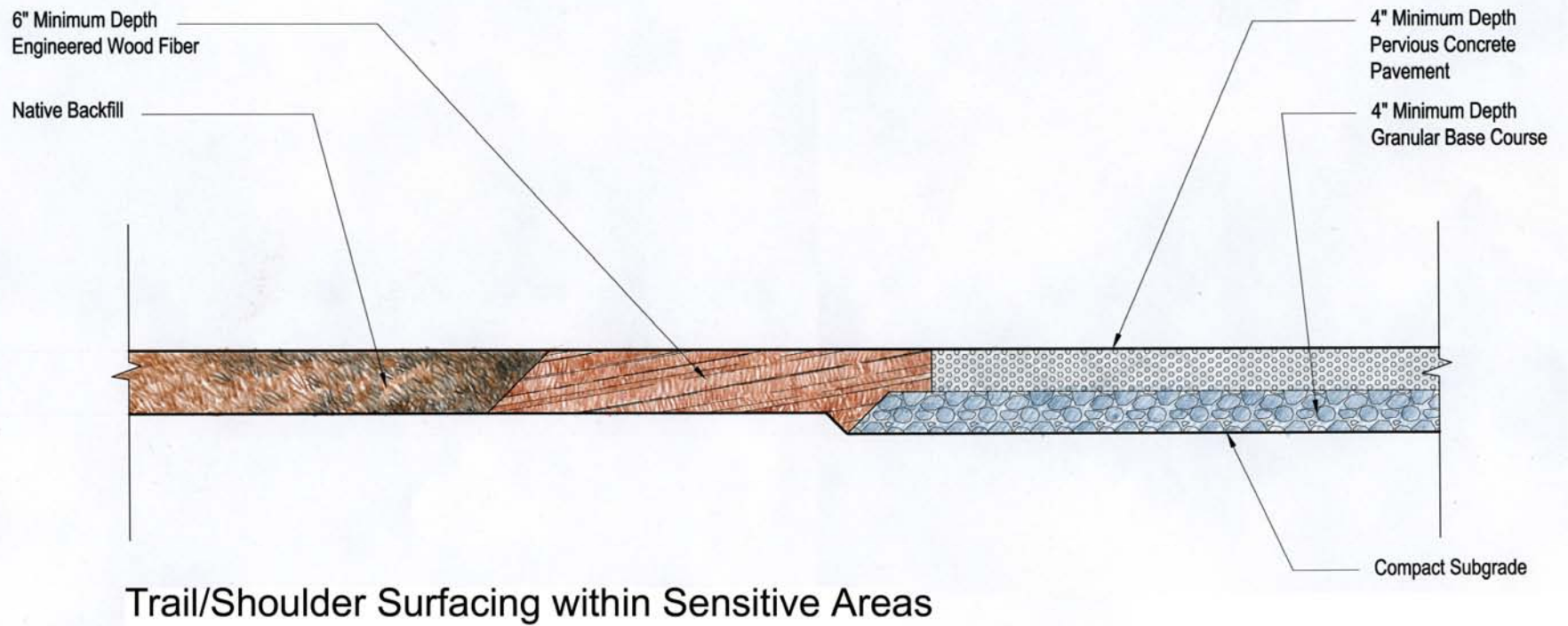
Section showing wall required for 24-foot trail width

- 24-foot width
- Reconstructed drainage ditch
- Approximate 6/7-foot wall

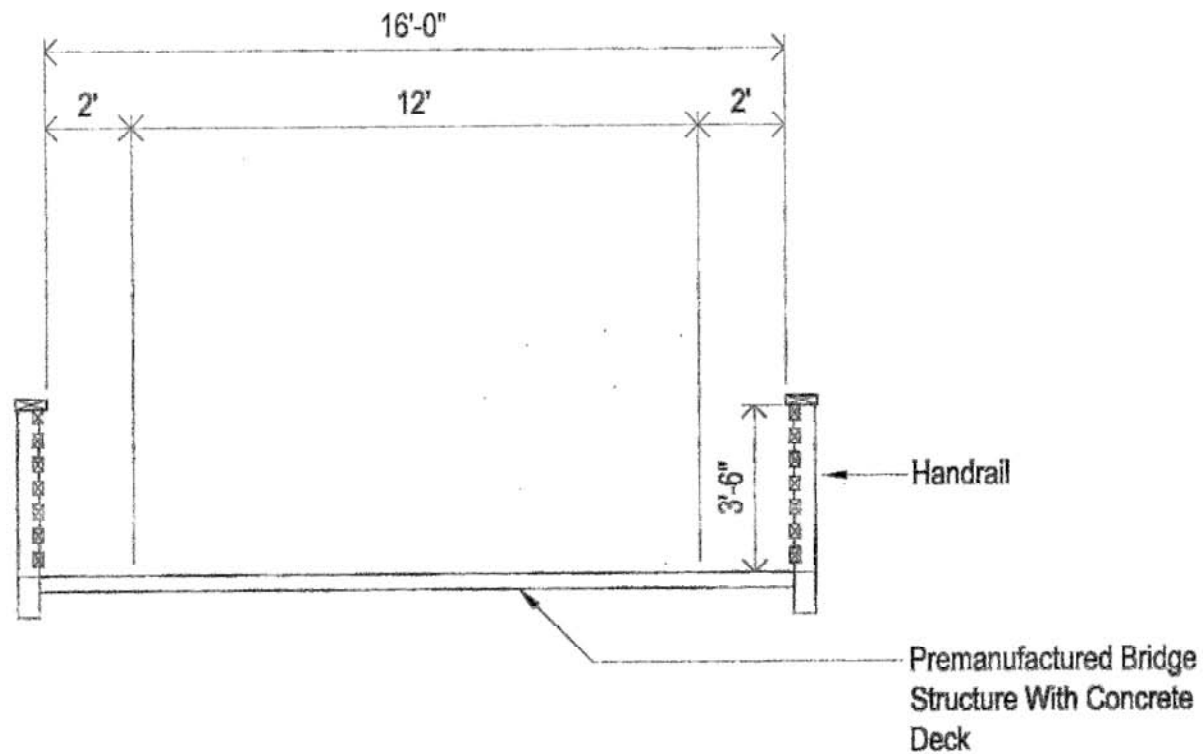
Typical Surfacing Details



Typical Trail/Shoulder Surfacing



Typical Bridge Section



Typical Bridge Section

- 12-foot wide travel zone
- 2-foot wide clear area both sides